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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                   | CONFIRMATION NO.       |
|--|-------------|----------------------|---------------------------------------|------------------------|
| 09/524,666   | 03/13/2000  | John G. Aceti        | SMI-13459pA                           | 6745                   |
| 21005 7590 11/28/2007<br>HAMILTON, BROOK, SMITH & REYNOLDS, P.C.<br>530 VIRGINIA ROAD<br>P.O. BOX 9133<br>CONCORD, MA 01742-9133 |             |                      | EXAMINER<br>DABNEY, PHYLESHA LARVINIA |                        |
|  |             |                      | ART UNIT<br>2614                      | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>11/28/2007               | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/524,666

Applicant(s)

ACETI ET AL.

Examiner

Phylesha L. Dabney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8-10,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 1,8,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

This action is in response to the Amendment received on 25 October 2007 in which claims 1, 4-5, 8, and 21-22 were elected and claims 9-10 are withdrawn.

#### *Election/Restrictions*

1. Applicant's election without traverse of Subspecies C (Figure 6) drawn to claims 1, 4-5, 8, and 21-22 in the reply filed on 11 September 2006 (OIPE stamped 11 December 2006) is acknowledged.

#### *Claim Objections*

2. Claim 22 is objected to because of the following informalities: newly added term "compliant" is misspelled. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Diethelm** (U.S. Patent No. 3,852,540), in view of **Voroba et al** (U.S. Patent No. 4,870,688).

Regarding claims 1 and 8, Diethelm teaches a base unit (2), an earmold (1, 3) removable attached to the base unit, a retention mechanism (col. 3 lines 13-34), and the earmold adapted m

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contain a hearing aid component non-removably integrated within the earmold, the hearing aid component comprising at least one of a battery (7,8), a receiver (5), and hearing aid electronics.

Diethelm does not teach the type of material used for the earmold; however, it is known in the art, as evidenced by Voroba (30), to use soft, malleable, compliant material for the earmold to facilitate comfort to the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the shell of Diethelm from a soft, malleable, compliant material to facilitate comfort to the user.

Neither Diethelm nor Voroba teaches the earmold having a shorter life than the base unit. However, it is known in the art to be able to replace the earmold portion within the life expectancy of the aid if the structure becomes compromised, i.e. brittle and torn, and improve comfort and hygienic concerns for the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the earmold of Diethelm in view of Voroba within the life expectancy of the aid for improved comfort and hygienic concerns.

4. Claim 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Diethelm** (U.S. Patent No. 3,852,540), in view of **Voroba** (U.S. Patent No. 4,870,688), and in view of **Baum** (U.S. Patent No. 2,487,038), and in further view of **Knudsen** (U.S. Patent No. 2,246,737)

Regarding claim 21, Diethelm teaches a base unit (2), an earmold (1, 3) comprising a battery (7, 8) and receiver (5), and a retention mechanism (col. 3 lines 13-34).

Diethelm does not teach the type of material used for the earmold; however, it is known in the art, as evidenced by Voroba (30), to use soft, malleable, compliant material for the

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earmold to facilitate comfort to the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the shell of Diethelm from a soft, malleable, compliant material to facilitate comfort to the user.

Furthermore, the combination of Diethelm and Voroba does not teach the earmold having a flexible, mushroom shaped earmold tip. However, it is known in the art, as evidence by Baum (figs. 1-5), for an earmold tip to have horizontal flanges (Knudsen; 12) for tightly sealing the auditory canal to the outside, providing comfort to the user, and for simulating a mushroom shaped tip. Therefore, it would have been obvious to one of ordinary skill in the art to include the flange(s) of Knudsen onto the earmold (Diethelm; 1, 3) of the combination of Diethelm and Voroba for tightly sealing the auditory canal to the outside and providing comfort to the user.

5. Claim **22** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Voroba** et al (U.S. Patent No. 4,870,688); in view of **Schroder** (U.S. Patent No. 4,736,430).

Regarding claim 22, Voroba teaches replacing a base unit of a hearing aid comprising the steps: providing a modular hearing aid (10) having a base unit (200) an earmold (30) and a module component (70); releasing a securing mechanism (50, 52, 244, 246, 248); removing the base unit (200); discarding the base unit (col. 5, lines 23-52); placing a second base unit (col. 5 lines 23-27) onto the earmold; and attaching the securing mechanism (50, 52, 110, 112).

Voroba does not teach the securing mechanism capable of being released by a user without the use of a separate tool or instrument. Schroder teaches an alternate rotational connection means (col. 2 line 59 through col. 3 line 2) for securing two hearing aid modules together and making it easier to disconnect the two housings. Therefore, it would have been

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obvious to one of ordinary skill in the art at the time the invention was made to include the rotational connection means in the invention of Voroba as taught by Schroder to make the two housings easier to separate.

However, it is known in the art to be able to replace the earmold portion within the life expectancy of the aid if the structure becomes compromised, i.e. brittle and torn, and improve comfort and hygienic concerns for the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the earmold of Voroba in view of Schroder within the life expectancy of the aid for improved comfort and hygienic concerns.

#### *Allowable Subject Matter*

6. Claims 4-5 are allowed. With respect to these claims, the prior art of record fails to teach that the modular hearing aid comprising a base unit and an earmold unit comprising a compliant material, a retention mechanism such that the earmold houses a nonremovable battery and a nonremovable receiver.

#### *Response to Arguments*

7. Applicant's arguments filed have been fully considered but they are not persuasive.

8. With respect to the Applicant's Arguments pertaining to independent claims 1, 21 and 22 that the combination of Diethelm and [an]other reference[s] fails to teach the language "an earmold unit adapted to contain a battery and a hearing aid component (receiver) non-removably integrated within the earmold unit, the Examiner disagrees. Based on the language used, claim 4

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is the sole claim which requires "both" the battery and receiver to be non-removable integrated in the earmold unit. As written, claims 1, 21, and 22 state a hearing aid component is non-removable (claim 1), the earmold being non-removable (claim 21), or a receiver non-removable (claim 22), which does not suggest that both the battery and receiver is non-removable. Therefore, the rejection of claims 1, 8, 21, and 22 is being maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L. Dabney whose telephone number is 571-272-7494. The examiner can normally be reached on Mondays, Wednesdays, Fridays 8:30-4 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**Any response to this action should be mailed to:**  
Commissioner of Patents and Trademarks  
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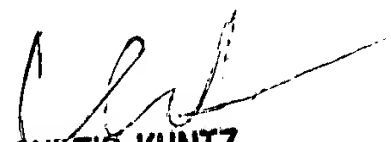
**Or faxed to:**  
(703) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "Proposed" or "Draft" when submitting an informal amendment.

**Hand-delivered responses should be brought to:**  
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November 25, 2007

PLD

  
**CURTIS KUNTZ**  
PATENT EXAMINER  
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